MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
INTELLIGENT TRANSPORTATION SYSTEMS COMMITTEE

September 3, 2003
MAG Cholla Room, 2nd Floor
302 North First Avenue
Phoenix, Arizona

MEMBERS ATTENDING

Jim Book, Glendale	Bruce Dressel, Scottsdale
Alan Sanderson, Mesa	*Jim Decker, Tempe
Brian Scifers for Mike Mah, Chandler	Tim Wolfe, ADOT
Mike Sutton for Bruce Ward, Gilbert	Ron Amaya for Scott Nodes, Peoria
Nicolaas Swart, Maricopa County	Chuck Hydeman, Goodyear
Bob Steele, Phoenix	*Mary Kihl, ASU
Bob Ciotti, RPTA	Alan Hansen, FHWA
*Terry Conner, DPS	*Dennis Murphy, Phoenix Aviation
Bob Maki, Surprise	*Michael Smith, Avondale

OTHERS PRESENT	
Pankaj Gupte, ADOT	Xiao Qin, MAG
Anne MacCracken, Valley Metro	Sarath Joshua, MAG
Arthur Dock, Mesa	

* Not present or represented by proxy

1. Call to Order

    Acting Chairman Alan Sanderson called the meeting to order at 9:35 AM. He asked that members introduce themselves for the benefit of Brian Scifers representing Mike Mah of Chandler.

2. Approval of August 6, 2003 Meeting Minutes

    Alan Sanderson noted that the attendance should reflect that he did not attend the meeting. Chuck Hydeman noted a correction for Item No. 7 indicating that Goodyear cannot lock out anyone not using coded operation. Chuck Hydeman moved and Bob Steele seconded, and it was unanimously carried to approve the corrected minutes of the August 6, 2003 ITS Committee meeting.

3. Call to Audience

    Acting Chairman Sanderson made a call to the audience providing an opportunity to members of the public to address the ITS Committee. There was no comment from the audience.

4. Program Managers Report

   The following is a summary of the report to the committee provided by Sarath Joshua:

   - The ITS/TE On-Call services contracts 6 have been signed by the selected consultants. Ten consultants have responded to Phase Two of the process and will lead to contracts. The first series of projects to be launched will be the Traffic Signal Synchronization Program. Member agencies will be contacted to identify candidate projects. This effort will be led by Mike Mah.

   - Regional ITS Infrastructure Inventory - feedback on Smart Corridors – we received feedback from a few members and the attachments provided shows the updated Smart Corridor network. Based on this new network we have compiled a new mileage for Smart Corridor network. A question was asked if there will be any changes to this map. The language in the draft RTP document dated Aug 26th refers to phasing of ITS projects and says "specific project listing and sequencing will be done in consultation with the MAG technical committees with final approval by the TPC." We have identified the projects but phasing of projects, particularly for FMS projects, the ITS committee will have an opportunity to recommend phasing. A question was asked if the street names and terminal information was available.

5. 2025 Regional Smart Corridor and FMS Coverage

   Sarath Joshua indicated that this agenda item was included as a follow-up to the brief discussion the committee had at the August meeting. At the time the committee felt it was important to establish priorities for implementation of various new FMS segments that will be funded through the RTP. He reminded the committee that a similar process was followed by this committee during the development of the Regional ITS Strategic Plan, when FMS implementation priorities were established by a subcommittee in consultation with ADOT. In preparation for this discussion, MAG staff prepared a number of exhibits showing future LOS on the freeway. However, in view of the language (identified in Program Managers report) in the RTP that states TPC will seek MAG ITS Committee input to determine FMS project phasing, there is no real urgency to carry out this task at the present time. Sarath Joshua recommended that, although this item was included as an action item, the committee defer action on this to a future time after the RTP has been finalized. Discussion on this item was tabled for a future date when the RTP is finalized and the committee will have access to more information.

6. Traffic Signal Preemption Practice

   Arthur Dock of Mesa was introduced to the committee as an expert in this subject area. He briefed members on the status of traffic signal preemption in the region. He made the following points during his presentation:

   He went on to highlight key issues of operation and usage of the system.
   He indicated that the first key area is Coding Interoperability: There are two primary signal preemption systems in the market place. They are made by: TOMAR and by 3M. They can be compatible with each other if you don't care to identify what vehicles are

activating the signal preemption system.

The other next key area in operation is what happens when you do get preemption. What happens to the through movement, left turns, what happens at 2-phase intersections and how do you terminate or reduce pedestrian crossing times. Do you go to a all-red all the time or only when you have to; what sort of maintenance and testing do you do; how do you set it up for the reception range; do you provide confirmation lights for the emergency vehicle driver; like a tattle-tale light or a flash green or some such indication; do you set maximum preemption times to prevent intersections from hanging; how do you educate your drivers on how to use the system and what to expect; what sort of legal issues are we dealing with; do we have ordinances to stop unauthorized use or violations of the system; what about other potential users such as police, ambulances; what about transit priority; who pays for the system – public safety or transit money; record keeping such as who has which vehicle ID that is identified by the system (in the case of coded operation);

He said that some time back Tempe Mesa and Chandler tried to resolve issues related to vehicle identification. Most cities do not have coding. Mesa is the only city to have complete coding of all emergency vehicles. Two years ago Mesa explored if we can run dual systems.
Typically EVP systems operate at two frequencies. The higher frequency operation is for signal preemption and the lower for applications like transit priority. The newer systems have more applications whereby the user can assign a higher priority for police or for ambulances etc.

Comments from other members:
When Phoenix looked at transit priority the plan was to keep it to background cycle.
With buses you can add an additional phase to the signal controller – a ninth phase – that is called for LRT or transit priority. What is more common is EV having preemption and transit having priority. The LRT system design in Phoenix will not incorporate any EV signal preemption at intersections where LRT will operate. The LRT will use transit priority in normal use but yield to EVs like all other vehicles when an EV is approaching the intersection.

Alan Sanderson asked what happened to the coding list developed for the region. Arthur Dock indicated that he has revised it recently and provided an updated copy for distribution to members. This list has not been formally adopted by anyone yet. In response to Bob Steele's question if there was a users group Arthur Dock indicated that there was such a group and perhaps needs reactivating. This group also included emergency service providers.

Chuck Hydeman indicated that Goodyear priority order is Fire, Police, and Ambulance. They elected not to use a cue light. Green arrow with green ball is the confirmation but fire trucks must slow down at the intersection. Goodyear would like to go to coded operation like Mesa their fire department ha– Southwest ambulances have been authorized to use preemption in Goodyear. Unfortunately their vehicles preempt in 360 degrees. Mesa used to have through and left arrow as an indicator and have moved away from that.

Arthur Dock said that if you do not have coding your system is open to abuse by anyone. He said that anyone could get a $300 device off the Internet to preempt any uncoded system. Even without unauthorized users Mesa experiences violations by authorized users. Arthur Dock indicated that in January 2002 Mesa had 6975 total preempts and of that between 4 to 5 pm there were 533 preempts. He said that was not a good sign for signal operations. We don't want anymore that we need to or else we may as well shutdown the system. Alan Sanderson suggested that EV signals group needs to address this subject on a bigger and formal scale. Jim Book too suggested the need for a standard of operations. The Concept of Operations has addressed this as a need and Jim Decker and Jan Siedler will lead this effort.

There was a general discussion on who does what in EVP in the region. Alan Sanderson informed that Arthur Dock made a very persuasive argument against the use of preemption by police and resulted in not allowing Mesa police use of preemption. He said he might email it to everyone. Arthur indicated that he used information based on the time-speed-distance relationship and other factors to support his argument. Sarath Joshua asked what was the main issue why coded operation was needed. Jim Book answered and stated that Southwest has gone to the legislature several times to allow them access but has been beaten back but a similar bill keeps coming back. The public asks what if they need an ambulance and does not understand that EMTs are in the fire trucks. EMTs cannot release the patient and they have to go back. He felt that a standard operation is needed across the region. Alan Sanderson said that why any city would care about this issue is that it affects your ability to move traffic across your city. It may not be a problem now but as volumes grow it will become a problem. Hydeman said that if there is a law suit a standard operation is more defensible than otherwise. Arthur said the single key issue is reducing liability. Jim Book said that if cities are to deny police or ambulances access to the system a unified effort is needed. To summarise Arthur reiterated that a regionwide users group needs to be created. Contact person from Phoenix for this effort should be Joes Havris and he may assign Rich Jeriha. Hydeman said that fire departments need to be involved in this effort.

ACTION: Jim Decker will lead this effort. MAG will help Jim in contacting cities to reactivate this effort.

7.   Status Reports by Committee Members

Phoenix regional fiber backbone advertisement for a Construction Manager at Risk will go out soon. Construction on Phoenix Downtown Traffic Management System will start next month. ADOT has the scope of work for the RCN project DCR probably will go out through ECS. Ron Amaya announced that Peoria's signal interconnect project is at 80 percent. Since their fiber recently got vandalized someone had pulled them out thinking that was copper. Peoria is also implementing TBC across the city and upgrading to the new Econolite TS2 standard. Nicolaas Swart stated that MCDOT is finalizing the scope of work for establishing new permanent agency owned communication links that were lost when the AZTech leases ran out in April. Mesa TMC building is almost done and the contractor is installing equipment.

9. Next Meeting Date

Next meeting date was announced as 10:00 AM on Wednesday October 1, 2003.

10. Adjournment

Acting Chairman Sanderson adjourned the meeting at 10:50 AM.